

# Hopping Green & Sams

Attorneys and Counselors

ORIGINAL

Writer's Direct Dial Number  
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July 1, 2005

**BY HAND DELIVERY**

Blanca Bayó  
Director, Office of the Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

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Re: Docket No. 050256-EM

Dear Ms. Bayó:

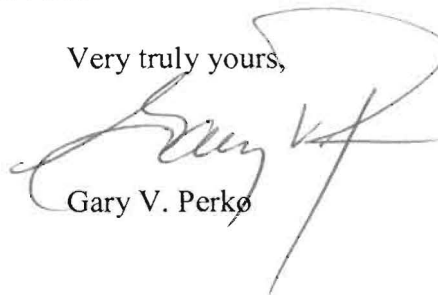
Enclosed for filing on behalf of Florida Municipal Power Agency ("FMPA") are the original and fifteen copies of the following:

- Errata sheet for direct testimony of Richard L. Casey;
- Errata sheet for direct testimony of Myron R. Rollins;
- Errata sheet for direct testimony of Jonathan F. Schaefer; and
- Errata sheet for FMPA Need for Power Application, Exhibit No. \_\_ (FMPA-1)

I also have included a diskette containing electronic versions of the documents. Copies of the documents have been provided to the persons on the attached certificate of service.

Please stamp and return the enclosed extra copy of this filing. If you have any questions regarding this filing, please give me a call at 425-2359.

Very truly yours,



Gary V. Perko

Enclosures  
cc: Certificate of Service

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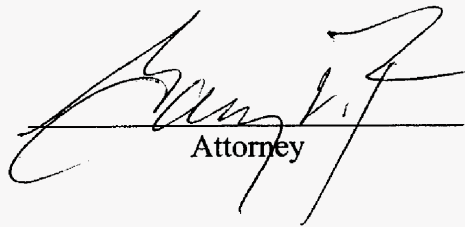
FPSC-COMMISSION CLERK

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that true and correct copies of Florida Municipal Power Agency's Errata Sheets for the Direct Testimony of Richard L. Casey, Myron R. Rollins and Jonathan F. Schaefer, and the Errata Sheet for Exhibit No. \_\_ (FMPA-1) have been furnished by e-mail and U.S. Mail, postage pre-paid to the following this 15<sup>th</sup> day of July, 2005:

Martha Carter Brown  
Staff Counsel  
Florida Public Service Commission  
2520 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Brian D. O'Neill  
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1875 Connecticut Avenue, N.W.  
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\_\_\_\_\_  
Attorney

ERRATA SHEET

DIRECT TESTIMONY OF RICHARD L. CASEY

DOCKET NO. 050256-EM

Page	Line	Correction
7	2	Insert "and planned unit retirements" after "units."
7	21	Insert "The expansion plan has been updated to reflect the planned retirement of Kissimmee Utility Authority's (KUA) Hansel diesel generating units (16 MW) in October 1, 2005."
8	1	Insert "Q. How does the City of Vero Beach's December 9, 2004 "Notice of Establishment of Contract Rate of Delivery" affect the expansion plan for the All-Requirements Project? A. This notice has been incorporated into the All-Requirements Project's (ARP) expansion plan, effective January 1, 2010."
10	6	Replace "11.2 percent" with "10.1 percent" and replace "58 MW" with "74 MW"
10	7	Replace lines 7 through 9 after the word "increase" with "with a slight decrease in 2011/12 from a forecasted capacity addition, but the deficit is still 3 MW. After this decrease, the deficit continues to increase. Summer reserve"
10	11	Replace "12 percent" with "10.9 percent" and replace "86 MW" with "102 MW"
11	1	Insert "base case" before "evaluations."
11	18	Replace "it" with "its"
17	1	Replace Table 2-5 in Exhibit No. RLC-2 with Revised Table 2-5

ERRATA SHEET

DIRECT TESTIMONY OF MYRON R ROLLINS

DOCKET NO. 050256-EM

Page	Line	Correction
11	9	Starting clause beginning with "none" replace the remainder of the sentence with "the evaluation includes the planned 16 MW retirement of KUA's Hansel diesel units in October, 2005."
11	10	Replace "some of these" with "additional"
13	21	Replace "\$23 million" with "nearly \$70 million"
14	6	Replace "\$14 million" with "nearly \$3.5 million"
14	8	Replace "\$279 million" with "nearly \$295 million"
14	10	Insert "The results I just described reflect an updated analysis that accounts for the potential impact of the City of Vero Beach's December 9, 2004 'Notice of Establishment of Contract Rate of Delivery.'"
15	24	Replace "\$0.5 million" with "\$12.2 million"
16	9	Insert "The results I just described reflect an updated analysis that accounts for the potential impact of the City of Vero Beach's December 9, 2004 'Notice of Establishment of Contract Rate of Delivery.'"
18	3	Replace "\$23.1 million" with "approximately \$70 million"

ERRATA SHEET

DIRECT TESTIMONY OF JONATHAN F. SCHAEFER

DOCKET NO. 050256-EM

Page	Line	Correction
3	15	Replace that question: "What were the results of the forecast for the All-Requirements Project's energy and demand?" with "Please summarize the All-Requirements Project's forecasted energy and demand."
3	17	Insert the following at the beginning of the sentence: "Taking into account an estimated Contract Rate of Delivery for the City of Vero Beach,"
3	18	Replace "10,916" with "9,683"
3	19	Replace "2014" with "2009"
3	19	Replace "2015" with "2010"
3	20	Beginning with the sentence "The winter peak demand . . ." replace the remainder of the paragraph with "The winter peak demand is expected to grow from 1,413.7 MW in 2005 to 1,877.0 MW in 2024 at an average annual growth rate of 2.5 percent from 2005-2009, and an average annual growth rate of 2.2 percent from 2010 through 2024. The summer peak demand is expected to grow from 1,407.1 MW in 2005 to 1,927.0 MW in 2024 at an average annual growth rate of 2.5 percent from 2005-2009, and an average annual growth rate of 2.2 percent from 2010 through 2024."

ERRATA SHEET

NEED FOR POWER APPLICATION - Exhibit No. \_\_ (FMPA-1)

TREASURE COAST ENERGY CENTER UNIT 1

DOCKET NO. 050256-EM

Witness	Page	Paragraph	Line	Correction
RLC	1-1	4	2	Replace "2.32 percent" with "1.50 percent"
RLC	1-3	3	14	Replace "\$23.1 million" with "\$69.8 million"
RLC	1-3	3	15	Replace "two LM6000" with "an LM6000 and a 7EA", replace "turbines" with "turbine"
RLC	1-3	3	17	Replace "\$14.2 million" with "at least \$3.5 million"
RLC	1-4	1	7	Replace "\$279.2 million" with "\$294.7 million"
RLC	1-5	2	3	Replace "\$23.1 million" with "69.8 million"
RLC	2-4	6	4	Insert "On December 9, 2004 Vero Beach submitted its 'Notice of Establishment of Contract Rate of Delivery' which becomes effective January 1, 2010"
RLC	2-7			Replace "35.521" with "32.521" in the last row in column three of Table 2-2
RLC	2-9			Replace Table 2-5 with the attached Revised Table 2-5
RLC	2-14	2	3	Replace "However, no unit retirements are" with "However, the only unit retirements" and insert "are the Hansel diesel units (16 MW) assumed to retire October 1, 2005." Following "application"
RLC	2-14	2	3	Insert "additional" after "If"
RLC	2-15			Replace Table 2-8 with attached Revised Table 2-8
JFS	3-2	4	3	Replace "2.4 percent" with "2.5 percent", replace "2013" with "2009", and replace "through 2023" with "from 2005 to 2024"
JFS	3-6	1	3	Replace "2014" with "2009" and insert "from 2010" following "percent"
JFS	3-7			Replace Table 3-2 with attached Revised Table 3-2
JFS	3-9			Replace Table 3-3 with attached Revised Table 3-3
JFS	3-10			Replace Table 3-4 with attached Revised Table 3-4
RLC	4-2	3	7	Replace "no firm system retirements have been assumed." with "only KUA's Hansel diesel units have been assumed to retire (16 MW)."
RLC	4-2	3		Insert new paragraph reading "It has also been assumed that the City of Vero Beach's (COVB)'s recent 'Notice of Establishment of Contract Rate of Delivery' submitted to FMPA December 9, 2004 reduces the forecast ARP summer peak demand by COVB's forecast summer peak while decreasing the ARP's summer generating capability by 198 MW (COVB's generation committed to the ARP). For the

				winter, forecast ARP peak demands are decreased by COVB's forecast winter peak demand while decreasing the ARP's winter generating capability by 203 MW (COVB's winter generation committed to the ARP) with the difference between COVB peak demand for the December, 2008 through November, 2009 period (207.5 MW), or 4.5 MW, determined as the Contract Rate of Delivery (CROD). The methodology used to determine CROD is consistent with the manner specified in Section 3 of the All-Requirements Power Supply Contract (Contract) dated October 1, 1996, as amended by Amendment No. 1 dated January 22, 1999. Section 3 of the amended Contract explains that CROD is equal to the peak demand of the Participant for capacity and energy during the 12 months preceding the date that is one month prior to the effectiveness of CROD, subject to adjustment at the sole discretion of FMPA, up or down by not more than a 15 percent reserve margin (with the stipulation that CROD, once reduced by the Participant's generating resources or certain other resources, cannot be a negative number). Five years notice is required for a Participant to establish CROD, which then becomes effective on the corresponding January 1, resulting in the assumed January 1, 2010 effective date for this analysis."
RLC	4-3	1	2	Insert "given consideration of COVB's CROD, as previously explained." after "period."
RLC	4-3	3	4	Replace "11.2 percent" with "10.1 percent" and replace "58 MW" with "74 MW"
RLC	4-3	3	5	Replace "2" with "two" and replace "243 MW" with "215 MW"
RLC	4-4			Replace Table 4-2 with attached Revised Table 4-2
RLC	4-5			Replace Table 4-3 with attached Revised Table 4-3
RLC	4-6	1	1	Replace "39 MW" with "3 MW"
RLC	4-6	2	3	Replace "12.0 percent" with "10.9 percent" and replaced "an 86 MW" with "a 102 MW"
RLC	4-6	2	4	Replace "2" with "two" and replaced "277 MW" with "282 MW"
RLC	4-6	2	7	Replace "101 MW" with "102 MW"
MRR	9-2	4	3	Insert "(incorporating the City of Vero Beach's December 9, 2004 'Notice of Establishment of Contract Rate of Delivery' described in Section 4.0)" after "forecast"
MRR	9-4	1	1	Replace "no retirements of existing units are assumed" with "KUA's Hansel diesel units are assumed to retire October 1, 2005,"

MRR	9-4	3	2	Replace "2013" with "2014"
MRR	9-4	3	3	Insert "an" before "LM6000", replace "turbines" with "turbine", and delete "2014 and"
MRR	9-5	1	6	Replace "\$5,076.31 million" with "\$4,618.33 million"
MRR	9-5	2	4	Replace "two" with "an" and insert "and a 7EA" following "LM6000"
MRR	9-5	2	5	Replace "turbines" with "turbine"
MRR	9-5	2	8	Replace "\$5,099.39 million" with "\$4,688.17 million" and replace "\$23.1 million" with "\$69.8 million"
MRR	9-5	3	6	Insert "an" before "LM6000" and replace "turbines" with "turbine"
MRR	9-5	3	7	Delete "2014 and"
MRR	9-5	4	10	Replace "\$5,100.22 million" with "\$4,634.18 million"
MRR	9-5	4	11	Replace "\$23.9 million" with "\$15.9 million"
MRR	9-6			Replace Table 9-1 with the attached Revised Table 9-1
MRR	9-7	1	2	Replace "\$5,187.50 million" with "\$4,718.30 million" and replace "\$111.2 million" with "approximately \$100 million"
MRR	9-7	2	4	Replace "at" with "after"
MRR	9-7	2	5	Replace "two" with "an", replace "turbines" with "turbine", and insert "in 2015" after "selected"
MRR	9-7	2	6	Replace "a 1x1 combined cycle in 2022" with "LM6000 combustion turbines in 2023 and 2024"
MRR	9-7	2	10	Replace "\$5,090.50 million" with "\$4,621.79 million"
MRR	9-7	2	11	Replace "\$14.2 million" with "\$3.5 million"
MRR	9-7	2	14	Replace "\$5,355.49 million" with "\$4,913.06 million" and replace "\$279.2 million" with "\$294.7 million"
MRR	9-7	4	4	Replace "2013" with "2014" and "at" with "after"
MRR	9-7	4	5	Replace "LM6000" with a "7EA", replace "turbines are" with "turbine is", and delete "2014 and"
MRR	9-7	4	7	Replace "2022" with "2023"
MRR	9-8	1	7	Replace "\$5,329.62 million" with "\$231.6 million"
MRR	9-8	2	6	Replaced "a two" with "three"
MRR	9-8	2	7	Replace "2017" with "2019"
MRR	9-8	2	9	Delete "followed by a 1x1 combined cycle in 2022"
MRR	9-8	3	8	Replace "\$5,267.05 million" with "\$4,858.38 million"
MRR	9-8	3	9	Replace "\$5,306.16 million" with "\$4,879.49 million", replace "\$190.7 million" with "\$240.1 million", and replace "\$229.8 million" with "\$279.2 million"
MRR	9-8	4	6	Replace "two LM6000 simple cycle combustion turbines." with "an LM6000 and a 7EA simple cycle combustion turbine."
MRR	9-9	1	2	Replace "Capacity is not needed again until 2024, at which time FMPA's 250 MW share of an 800 MW supercritical pulverized coal unit is selected." with "The 635 MW proposed by Bidder C in conjunction"



				with the LM6000 and 7EA simple cycle combustion turbines satisfies capacity requirements through 2024.”
MRR	9-9	2	7	Replace “\$5,382.10 million” with “\$4,938.08 million”
MRR	9-9	2	8	Replace “\$5,429.50 million” with “\$4,985.48 million”, replace “\$305.8” million with “\$319.7 million”, and replace “\$353.2 million” with “\$367.1 million”
MRR	9-9	3	4	Replace “\$23.1 million” with “\$69.8 million”
MRR	9-9	3	6	Replace “\$14.2 million” with “\$3.5 million”
MRR	9-10			Replace Table 9-2 with the attached Revised Table 9-2.
MRR	10-1	2	5	Insert “an” before “LM6000”
MRR	10-1	2	6	Replace “turbines” with “turbine” and delete “2014 and”
MRR	10-1	2	7	Replace “\$5,889.35 million” with “\$5,332.36 million”
MRR	10-1	2	9	Replace “\$14.0 million” with “\$4.8 million”
MRR	10-1	2	11	Replace “two” with “an” and replace “turbines” with “turbine”
MRR	10-1	2	12	Replace “a 1x1 7FA combined cycle in 2023” with “LM6000 simple cycle combustion turbines in 2023 and 2024”
MRR	10-1	2	13	Replace “\$5,903.32 million” with “\$5,337.13 million”
MRR	10-1	3	5	Insert “an” before “LM6000”
MRR	10-1	3	6	Replace “turbines” with “turbine” and delete “2014 and”
MRR	10-1	3	7	Replace “a 7FA” with “LM6000”, replace “turbine” with “turbines”, and insert “2023, and 2024” after “2022.”
MRR	10-1	3	7	Replace “\$4,415.70 million” with “\$4,043.75 million”
MRR	10-4	1	1	Replace “\$18.0 million lower” with “\$4.6 million higher”
MRR	10-4	1	3	Replace “two” with “an” and replace “turbines” with “turbine”
MRR	10-4	1	4	Insert “and” before “LM6000”
MRR	10-4	1	5	Delete “and a 7EA simple cycle combustion turbine in 2024”
MRR	10-4	1	6	Replace “\$4,433.72 million” with “\$4,039.18 million”
MRR	10-4	4	3	Replace “LM6000” with “a 7EA” and replace “turbines” with “turbine”
MRR	10-4	4	4	Delete “2010,” and “and 2015,”
MRR	10-4	4	5	Replace “\$5,554.21 million” with “\$5,079.94 million”
MRR	10-4	4	7	Replace “\$22.9 million” with “\$18.6 million”
MRR	10-4	4	10	Replace “2014” with 2015” and “a 7EA simple cycle combustion turbine in 2015”
MRR	10-5			Replace Table 10-3 with the attached Revised Table 10-3

MRR	10-6			Replace Table 10-4 with the attached Revised Table 10-4
MRR	10-7	1	2	Replace “2021” with “2022” and replace “\$5,577.07 million” with “\$5,081.80 million”
MRR	10-7	4	3	Insert comma after “2017”, delete “and a 1x1 7FA combined cycle in 2023,”
MRR	10-7	4	4	Replace “\$4,656.17 million” with “\$4,249.12 million”
MRR	10-7	4	5	Replace “\$12.0 million” with “\$44.6 million”
MRR	10-7	4	8	Replace “2017” with “2019,” and delete “and a 1x1 7FA combined cycle in 2024,”
MRR	10-7	4	9	Replace “\$4,668.12” million with “\$4,293.76 million”
MRR	10-8			Replace Table 10-5 with attached Revised Table 10-5
MRR	10-9			Replace Table 10-6 with attached Revised Table 10-6
MRR	10-10	1	3	Insert “an” before “LM6000”, replace “turbines” with “turbine”, and delete “2014 and”
MRR	10-10	1	4	Replace “a 1x1 7FA combined cycle in 2022” with “LM6000 simple cycle combustion turbines in 2022, 2023, and 2024”
MRR	10-10	1	5	Replace “\$5,113.5 million” with “\$4,649.99 million”
MRR	10-10	1	6	Replace “\$0.5 million” with “\$12.2 million”
MRR	10-10	1	8	Replace “two” with “an” and replace “turbines” with “turbine”
MRR	10-10	1	9	Replace “a 1x1 7FA combined cycle in 2022” with “LM6000 simple cycle combustion turbines in 2023 and 2024”
MRR	10-10	1	10	Replace “\$5,133.07 million” with \$4,637.80 million”
MRR	10-10	2	4	Insert “an” before “LM6000”, replace “turbines” with “turbine”, and delete “2014 and”
MRR	10-10	2	6	Replace “\$5,034.08 million” with “\$4,582.79 million”
MRR	10-10	2	7	Replace “\$28.9 million” with “\$23.0 million”
MRR	10-10	2	9	Replace “two” with “an” and replace “turbines” with “turbine”
MRR	10-10	2	10	Replace “a 1x1 7FA combined cycle in 2022” with LM6000 simple cycle combustion turbines in 2023 and 2024”
MRR	10-10	2	11	Replace “\$5,067.94 million” with “\$4,605.78 million”
MRR	10-10	3	6	Insert “a” before “LM6000”
MRR	10-10	3	7	Replace “turbines” with “turbine” and delete “2014 and”
MRR	10-10	3	9	Replace “\$3,958.96 million” with “\$3,631.24 million”
MRR	10-10	3	10	Replace “11.6 million” with “4.5 million”
MRR	10-10	3	12	Replace “two” with “an” and replace “turbines” with “turbine”

MRR	10-11	1	1	Replace “a 1x1 7FA combined cycle in 2022” with “LM6000 simple cycle combustion turbines in 2023 and 2024”
MRR	10-11	1	2	Replace “\$3,970.60 million” with “\$3.635.73 million”
MRR	10-11	2	3	Insert “and low fuel price” after “cost” and replace “scenario” with “scenarios”
MRR	10-12			Replace Table 10-7 with attached Revised Table 10-7
MRR	15-1	2	8	Replace “\$23.1 million” with “\$69.8 million”
MRR	15-1	3	9	Replace “\$23.9 million” with “\$15.9 million”
MRR	15-1	3	12	Replace “\$14.2million” with “\$3.5 million”
MRR	Appendix E			Replace entire Appendix E with attached Revised Appendix E

**Revised Table 2-5  
ARP's Existing Resource Capacity**

Generating Resources	Existing Summer Rating							
	2005	2006	2007	2008	2009	2010	2011-2012	2013-2024
Excluded Resources (Nuclear) <sup>1</sup>	83	83	83	83	83	72	72	72
Stanton Coal Plant <sup>1</sup>	220	220	220	220	220	183	183	183
Stanton CC Unit A <sup>2</sup>	127	127	127	127	127	127	127	127
Cane Island 1-3	379	379	379	379	379	379	379	379
Indian River CTs	80	80	80	80	80	80	80	80
Key West Units 2&3	36	36	36	36	36	36	36	36
Ft. Pierce Native Generation	118	118	118	118	118	118	118	118
Key West Native Generation	50	50	50	50	50	50	50	50
Kissimmee Native Generation <sup>3</sup>	61	45	45	45	45	45	45	45
Lake Worth Native Generation	88	88	88	88	88	88	88	88
Vero Beach Native Generation <sup>1</sup>	150	150	150	150	150	0	0	0
<b>Total Generating Capacity</b>	<b>1,392</b>	<b>1,376</b>	<b>1,376</b>	<b>1,376</b>	<b>1,376</b>	<b>1,178</b>	<b>1,178</b>	<b>1,178</b>
<b>Purchased Power</b>								
PEF Partial Requirements	30	40	0	20	0	25	0	0
FPL Partial Requirements	75	75	75	0	0	0	0	0
FPL Long-Term Partial Requirements	45	45	45	45	45	45	45	0
OUC Indian River Purchase	43	22	0	0	0	0	0	0
Starke (GRU)	3	3	0	0	0	0	0	0
Lakeland Purchase	100	100	100	0	0	0	0	0
Calpine Purchase	35	75	100	100	100	0	0	0
<b>Total Purchased Power Resources</b>	<b>331</b>	<b>360</b>	<b>320</b>	<b>165</b>	<b>145</b>	<b>70</b>	<b>45</b>	<b>0</b>
<b>Total Resources</b>	<b>1,723</b>	<b>1,736</b>	<b>1,696</b>	<b>1,535</b>	<b>1,521</b>	<b>1,248</b>	<b>1,223</b>	<b>1,178</b>

<sup>1</sup>Reflects the City of Vero Beach's December 9, 2004 "Notice of Establishment of Contract Rate of Delivery," effective January 1, 2010 as described in Section 4.

<sup>2</sup>Includes capacity purchased from Stanton CC Unit A.

<sup>3</sup>Reflects retirement of Hansel diesel units (16 MW) effective October 1, 2005

**Revised Table 2-8  
Possible Unit Retirements by Generating Member**

Year	Capacity (MW)	Current Age
<b>Fort Pierce</b>		
King Diesels 1-2	5.0	35 years
King 7	32.0	41 years
King 8	50.0	28 years
King 5/9 CC	31.0	52/14 years
<b>Total Fort Pierce</b>	<b>118.0</b>	
<b>Keys Energy</b>		
Big Pine Key	2.5	36 years
Cudjoe Key	4.5	36 years
<b>Total Keys Energy</b>	<b>7.0</b>	
<b>Kissimmee</b>		
Hansel CC	45.0	21 years
<b>Total Kissimmee</b>	<b>45.0</b>	
<b>Lake Worth</b>		
Smith Diesels 1-5	10.0	39 years
Smith GT 1	26.0	28 years
Smith 3	22.0	37 years
Smith 2/5 CC	30.0	27 years
<b>Total Lake Worth</b>	<b>88.0</b>	
<b>Vero Beach</b>		
Vero 1	12.0	43 years
Vero 3	34.0	33 years
Vero 4	56.0	28 years
Vero 2/5 CC	48.0	41/13 years
<b>Total Vero Beach</b>	<b>150.0</b>	
<b>Total Capacity</b>	<b>408.0</b>	

Revised Table 3-2  
Base Demand and Energy Forecast

Year	Winter Peak (MW)	Summer Peak (MW)	Net Energy For Load (GWh)
2005	1,413.7	1,407.1	7,069
2006	1,451.5	1,444.5	7,262
2007	1,482.9	1,476.4	7,419
2008	1,515.0	1,509.2	7,586
2009	1,562.2	1,553.8	7,810
2010	1,389.3	1,414.0	7,125
2011	1,421.5	1,448.0	7,297
2012	1,454.4	1,482.9	7,473
2013	1,488.9	1,519.3	7,656
2014	1,522.3	1,554.7	7,831
2015	1,556.3	1,590.5	8,012
2016	1,591.8	1,627.9	8,199
2017	1,627.5	1,665.4	8,385
2018	1,662.9	1,702.5	8,570
2019	1,697.9	1,739.3	8,752
2020	1,732.8	1,775.9	8,935
2021	1,768.2	1,813.0	9,119
2022	1,803.9	1,850.4	9,305
2023	1,839.9	1,888.1	9,492
2024	1,876.7	1,926.6	9,683

Revised Table 3-3  
High Demand And Energy Forecast

Year	Winter Peak (MW)	Summer Peak (MW)	Net Energy (GWh)
2005	1,498.4	1,490.4	7,489
2006	1,539.2	1,530.7	7,697
2007	1,572.8	1,564.8	7,865
2008	1,607.2	1,599.9	8,045
2009	1,657.8	1,647.7	8,285
2010	1,487.0	1,498.8	7,613
2011	1,521.5	1,535.2	7,798
2012	1,556.8	1,572.6	7,987
2013	1,593.8	1,611.7	8,184
2014	1,629.9	1,649.9	8,374
2015	1,666.7	1,688.6	8,570
2016	1,705.1	1,729.0	8,772
2017	1,743.8	1,769.6	8,975
2018	1,782.2	1,809.9	9,176
2019	1,820.3	1,849.8	9,374
2020	1,858.3	1,889.7	9,573
2021	1,896.8	1,930.1	9,775
2022	1,935.7	1,970.7	9,977
2023	1,975.0	2,011.8	10,182
2024	2,015.1	2,053.7	10,391

Revised Table 3-4  
Low Demand and Energy Forecast

Year	Winter Peak (MW)	Summer Peak (MW)	Net Energy (GWh)
2005	1,329.7	1,324.6	6,652
2006	1,364.6	1,359.1	6,830
2007	1,393.8	1,388.8	6,976
2008	1,423.6	1,419.2	7,131
2009	1,467.4	1,460.6	7,339
2010	1,301.6	1,329.9	6,681
2011	1,331.5	1,361.5	6,840
2012	1,362.1	1,393.9	7,003
2013	1,394.0	1,427.7	7,172
2014	1,424.9	1,460.3	7,333
2015	1,456.1	1,493.3	7,499
2016	1,488.7	1,527.6	7,670
2017	1,521.4	1,562.0	7,840
2018	1,553.8	1,596.1	8,009
2019	1,585.7	1,629.7	8,175
2020	1,617.6	1,663.2	8,341
2021	1,649.9	1,697.1	8,509
2022	1,682.4	1,731.2	8,677
2023	1,715.3	1,765.5	8,847
2024	1,748.8	1,800.6	9,021



**Revised Table 4-2  
Projected Reliability Levels - Winter/Base Case**

Year	Net Generating Capacity (MW)	Non-Partial Requirements Purchases (MW)	Partial Requirements Purchases	Net Firm Planned Capacity Retirements <sup>1</sup> (MW)	Net Firm Capacity Additions <sup>2</sup> (MW)	Net System Capacity (MW)	System Peak Demand		Reserve Margin <sup>3</sup>		Excess/(Deficit) to Maintain 15% Reserve Margin	
							Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)	Before Interruptible and Load Management (%)	After Interruptible and Load Management (%)	Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)
2004/05	1,343	251	150	0	0	1,744	1,414	1,414	26.1%	26.1%	141	141
2005/06	1,343	305	160	(16)	0	1,792	1,452	1,452	26.4%	26.4%	147	147
2006/07	1,343	305	120	(16)	42	1,794	1,483	1,483	22.8%	22.8%	107	107
2007/08	1,343	205	65	(16)	139	1,736	1,515	1,515	15.2%	15.2%	3	3
2008/09	1,343	205	45	(16)	139	1,716	1,562	1,562	10.1%	10.1%	(74)	(74)
2009/10	1,140	105	70	(16)	139	1,438	1,389	1,389	3.7%	3.7%	(149)	(149)
2010/11	1,140	105	45	(16)	139	1,413	1,421	1,421	-0.6%	-0.6%	(215)	(215)
2011/12	1,140	105	45	(16)	389	1,663	1,454	1,454	14.8%	14.8%	(3)	(3)
2012/13	1,140	105	45	(16)	389	1,663	1,489	1,489	12.1%	12.1%	(42)	(42)
2013/14	1,140	105	0	(16)	389	1,618	1,522	1,522	6.3%	6.3%	(133)	(133)
2014/15	1,140	105	0	(16)	389	1,618	1,556	1,556	4.0%	4.0%	(172)	(172)
2015/16	1,140	105	0	(16)	389	1,618	1,592	1,592	1.6%	1.6%	(213)	(213)
2016/17	1,140	105	0	(16)	389	1,618	1,627	1,627	-0.6%	-0.6%	(254)	(254)
2017/18	1,140	105	0	(16)	431	1,660	1,663	1,663	-0.2%	-0.2%	(252)	(252)
2018/19	1,140	105	0	(16)	431	1,660	1,698	1,698	-2.2%	-2.2%	(293)	(293)
2019/20	1,140	105	0	(16)	431	1,660	1,733	1,733	-4.2%	-4.2%	(333)	(333)
2020/21	1,140	105	0	(16)	431	1,660	1,768	1,768	-6.1%	-6.1%	(373)	(373)
2021/22	1,140	105	0	(16)	431	1,660	1,804	1,804	-8.0%	-8.0%	(414)	(414)
2022/23	1,140	105	0	(16)	431	1,660	1,840	1,840	-9.8%	-9.8%	(456)	(456)
2023/24	1,140	105	0	(16)	431	1,660	1,877	1,877	-11.5%	-11.5%	(498)	(498)

<sup>1</sup>Reflects retirement of KUA's Hansel diesel units (16 MW) effective October 1, 2005.

<sup>2</sup>Firm capacity additions include Stock Island Combustion Turbine Unit 4 on line in January 2006, and 250 MW of a joint development coal plant in 2011. Also includes two LM6000 CTs in December 2007, and Stock Island Combustion Turbine Unit 5 in January 2018 to meet on-island capacity reserve requirements.

<sup>3</sup>Reserve margin calculated as described in Subsection 4.1.1.

**Revised Table 4-3  
Projected Reliability Levels - Summer/Base Case**

Year	Net Generating Capacity (MW)	Non-Partial Requirements Purchases (MW)	Partial Requirements Purchases	Net Firm Planned Capacity Retirements <sup>1</sup> (MW)	Net Firm Capacity Additions <sup>2</sup> (MW)	Net System Capacity (MW)	System Peak Demand		Reserve Margin <sup>3</sup>		Excess/(Deficit) to Maintain 18% Reserve Margin	
							Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)	Before Interruptible and Load Management (%)	After Interruptible and Load Management (%)	Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)
							2004	1,287	273	140	0	0
2005	1,287	286	150	0	0	1,723	1,407	1,407	25.1%	25.1%	90	90
2006	1,287	305	160	(16)	42	1,778	1,445	1,445	26.0%	26.0%	102	102
2007	1,287	305	120	(16)	42	1,738	1,476	1,476	19.3%	19.3%	17	17
2008	1,287	205	65	(16)	126	1,667	1,509	1,509	10.9%	10.9%	(102)	(102)
2009	1,287	205	45	(16)	126	1,647	1,554	1,554	6.2%	6.2%	(178)	(178)
2010	1,089	105	70	(16)	126	1,374	1,414	1,414	-3.0%	-3.0%	(282)	(282)
2011	1,089	105	45	(16)	376	1,599	1,448	1,448	10.8%	10.8%	(102)	(102)
2012	1,089	105	45	(16)	376	1,599	1,483	1,483	8.1%	8.1%	(143)	(143)
2013	1,089	105	0	(16)	376	1,554	1,519	1,519	2.3%	2.3%	(239)	(239)
2014	1,089	105	0	(16)	376	1,554	1,555	1,555	0.0%	0.0%	(281)	(281)
2015	1,089	105	0	(16)	376	1,554	1,591	1,591	-2.3%	-2.3%	(323)	(323)
2016	1,089	105	0	(16)	376	1,554	1,628	1,628	-4.5%	-4.5%	(367)	(367)
2017	1,089	105	0	(16)	376	1,554	1,665	1,665	-6.7%	-6.7%	(411)	(411)
2018	1,089	105	0	(16)	418	1,596	1,703	1,703	-6.3%	-6.3%	(413)	(413)
2019	1,089	105	0	(16)	418	1,596	1,739	1,739	-8.2%	-8.2%	(456)	(456)
2020	1,089	105	0	(16)	418	1,596	1,776	1,776	-10.1%	-10.1%	(500)	(500)
2021	1,089	105	0	(16)	418	1,596	1,813	1,813	-12.0%	-12.0%	(543)	(543)
2022	1,089	105	0	(16)	418	1,596	1,850	1,850	-13.7%	-13.7%	(587)	(587)
2023	1,089	105	0	(16)	418	1,596	1,888	1,888	-15.5%	-15.5%	(632)	(632)
2024	1,089	105	0	(16)	418	1,596	1,927	1,927	-17.2%	-17.2%	(677)	(677)

<sup>1</sup>Reflects retirement of KUA's Hansel diesel units (16 MW) effective October 1, 2005.

<sup>2</sup>Firm capacity additions include Stock Island Combustion Turbine Unit 4 on line in January 2006, and 250 MW of a joint development coal plant in 2011. Also includes two LM6000 CTs in December 2007, and Stock Island Combustion Turbine Unit 5 in January 2018 to meet on-island capacity reserve requirements.

<sup>3</sup>Reserve margin calculated as described in Subsection 4.1.1.

**Revised Table 9-1  
Treasure Coast Energy Center Unit 1 Cumulative Present Worth Cost**

Case Description			Economic Parameters				Financial Parameters		
Scenario:	TCEC NFP		CPW Discount Rate:	5.0%		Fixed Charge Rate:	7.754%		
Sensitivity:	Base Case TCEC		Capital Escalation Rate:	2.5%		Interest During Const.:	5.0%		
Initial Unit Addition	TCEC Unit 1		Base Year for \$	2005		Finance Term (yrs):	30		
						Plant Life:	30		

Generation Additions							
Unit	Size (MW)	2005 Capital Cost <sup>1</sup> (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
TCEC Unit 1	301	217,672	22	06/01	2008	229,711	17,812
LM6000	47.5	32,176	8	06/01	2015	41,950	3,253
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
1X1 7FA	301	177,325	22	06/01	2022	278,702	21,611

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed <sup>2</sup> (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424
2008	\$245,841	\$31,267	\$5,479	\$1,580	\$0	\$284,167	\$17,812	\$0	\$0	\$0	\$0	\$10,390	\$294,557	\$1,074,873
2009	\$257,316	\$33,433	\$12,392	\$1,533	\$0	\$304,674	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$322,486	\$1,340,183
2010	\$248,435	\$33,122	\$12,442	\$1,720	\$0	\$295,719	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$313,531	\$1,585,843
2011	\$234,715	\$33,146	\$12,494	\$2,100	\$0	\$282,455	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$300,267	\$1,809,907
2012	\$235,889	\$32,828	\$12,547	\$1,484	\$0	\$282,747	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$300,559	\$2,023,508
2013	\$257,974	\$29,873	\$12,801	\$1,611	\$0	\$302,059	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$319,871	\$2,240,010
2014	\$276,728	\$27,795	\$12,656	\$1,856	\$0	\$319,035	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$336,847	\$2,457,144
2015	\$298,740	\$29,186	\$13,357	\$1,814	\$0	\$343,097	\$21,065	\$0	\$0	\$0	\$0	\$19,709	\$362,806	\$2,679,876
2016	\$284,262	\$27,723	\$16,124	\$1,670	\$0	\$329,778	\$55,353	\$0	\$0	\$0	\$0	\$41,066	\$370,844	\$2,896,701
2017	\$285,261	\$27,232	\$17,879	\$1,369	\$0	\$331,741	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$387,094	\$3,112,249
2018	\$299,310	\$28,695	\$18,066	\$1,643	\$0	\$347,713	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$403,066	\$3,326,004
2019	\$319,343	\$30,187	\$18,258	\$1,752	\$0	\$369,540	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$424,892	\$3,540,603
2020	\$341,990	\$31,629	\$18,455	\$1,651	\$0	\$393,724	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$449,077	\$3,756,617
2021	\$358,579	\$33,258	\$18,657	\$2,065	\$0	\$412,559	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$467,912	\$3,970,973
2022	\$360,734	\$35,196	\$26,479	\$2,428	\$0	\$424,838	\$76,963	\$0	\$0	\$0	\$0	\$67,959	\$492,797	\$4,185,978
2023	\$369,587	\$37,135	\$32,111	\$2,304	\$0	\$441,138	\$76,963	\$0	\$0	\$0	\$0	\$76,963	\$518,102	\$4,401,260
2024	\$398,226	\$38,968	\$32,376	\$1,986	\$0	\$471,557	\$76,963	\$0	\$0	\$0	\$0	\$76,963	\$548,520	\$4,618,328

**Notes:**

- (1) Capital cost for TCEC Unit 1 is presented in as spent dollars for 2008 operation, but does not include interest during construction.
- (2) Fixed costs are included only for new unit additions.

Revised Table 9-2  
Summary of Capacity Expansion Plan Results

Year	Base Case (TCEC Unit 1)	Second Best Self-Build	Bidder A 5 Year	Bidder A 20 Year	Bidder B	Bidder C 1x1 CC Escalating	Bidder C 1x1 CC Levelized	Bidder C 2x1 CC Escalating	Bidder C 2x1 CC Levelized
2005									
2006									
2007									
2008	TCEC Unit 1	LM6000 7EA	Bidder A, 5 Year	Bidder A, 20 Year	Bidder B	3 LM6000s	3 LM6000s	7EA CT LM6000	7EA CT LM6000
2009		TCEC Unit 1				Bidder C 1x1	Bidder C 1x1	Bidder C 300 MW	Bidder C 300 MW
2010								410 MW	410 MW
2011								520 MW	520 MW
2012								635 MW	635 MW
2013			TCEC Unit 1						
2014									
2015	LM6000		LM6000	LM6000	7EA				
2016	250 MW PC	250 MW PC	250 MW PC	250 MW PC	250 MW PC				
2017									
2018									
2019						250 MW PC	250 MW PC		
2020									
2021									
2022	TCEC Unit 2		TCEC Unit 2						
2023				LM6000	TCEC Unit 1				
2024		TCEC Unit 2		LM6000					
CPWC \$ 000s	4,618	4,688	4,634	4,622	4,850	4,858	4,897	4,938	4,985
Differential CPWC	Base	70	16 <sup>1</sup>	4 <sup>2</sup>	232	240	279	320	367

1. Increases to \$100 million if interruptible natural gas is not assumed available on a firm basis.

2. Increases to \$295 million if interruptible natural gas is not assumed available on a firm basis.

Notes: Committed units not shown. TCEC Unit 1 is first self-build combined cycle at the site. TCEC Unit 2 is the second self-build combined cycle at the site.

**Revised Table 10-3**  
**FMPA Projected Reliability Levels - Summer/High Load and Energy Sensitivity**

Year	Net Generating Capacity (MW)	Non- Partial Requirements Purchases (MW)	Partial Requirements Purchases (MW)	Net Firm Planned Capacity Retirements <sup>1</sup> (MW)	Net Firm Capacity Additions <sup>2</sup> (MW)	Net System Capacity (MW)	System Peak Demand		Reserve Margin <sup>3</sup>		Excess/(Deficit) to Maintain 15% Reserve Margin	
							Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)	Before Interruptible and Load Management (%)	After Interruptible and Load Management (%)	Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)
2005	1,287	286	150	0	0	1,723	1,490	1,490	17.4%	17.4%	(9)	(9)
2006	1,287	305	160	(16)	42	1,778	1,531	1,531	18.0%	18.0%	1	1
2007	1,287	305	120	(16)	42	1,738	1,565	1,565	12.0%	12.0%	(87)	(87)
2008	1,287	205	65	(16)	126	1,667	1,600	1,600	4.4%	4.4%	(209)	(209)
2009	1,287	205	45	(16)	126	1,647	1,648	1,648	0.0%	0.0%	(289)	(289)
2010	1,089	105	70	(16)	126	1,374	1,499	1,499	-8.7%	-8.7%	(382)	(382)
2011	1,089	105	45	(16)	376	1,599	1,535	1,535	4.3%	4.3%	(204)	(204)
2012	1,089	105	45	(16)	376	1,599	1,573	1,573	1.7%	1.7%	(249)	(249)
2013	1,089	105	0	(16)	376	1,554	1,612	1,612	-3.6%	-3.6%	(348)	(348)
2014	1,089	105	0	(16)	376	1,554	1,650	1,650	-5.8%	-5.8%	(393)	(393)
2015	1,089	105	0	(16)	376	1,554	1,689	1,689	-8.0%	-8.0%	(439)	(439)
2016	1,089	105	0	(16)	376	1,554	1,729	1,729	-10.1%	-10.1%	(486)	(486)
2017	1,089	105	0	(16)	376	1,554	1,770	1,770	-12.2%	-12.2%	(534)	(534)
2018	1,089	105	0	(16)	418	1,596	1,810	1,810	-11.8%	-11.8%	(540)	(540)
2019	1,089	105	0	(16)	418	1,596	1,850	1,850	-13.7%	-13.7%	(587)	(587)
2020	1,089	105	0	(16)	418	1,596	1,890	1,890	-15.5%	-15.5%	(634)	(634)
2021	1,089	105	0	(16)	418	1,596	1,930	1,930	-17.3%	-17.3%	(681)	(681)
2022	1,089	105	0	(16)	418	1,596	1,971	1,971	-19.0%	-19.0%	(729)	(729)
2023	1,089	105	0	(16)	418	1,596	2,012	2,012	-20.7%	-20.7%	(778)	(778)
2024	1,089	105	0	(16)	418	1,596	2,054	2,054	-22.3%	-22.3%	(827)	(827)

<sup>1</sup> Reflects retirement of KUA's Hansel diesel units effective October 1, 2005.

<sup>2</sup> Firm capacity additions include Stock Island Combustion Turbine Unit 4 on line in January 2006, and 250 MW of a joint development coal plant in 2011. Also includes two LM6000 CTs in December 2007, and Stock Island Combustion Turbine Unit 5 January 2018.

<sup>3</sup> Reserve margin calculated as (Net System Capacity - System Peak Demand) / (System Peak Demand - Partial Requirements Purchases).

**Revised Table 10-4  
FMPA Projected Reliability Levels - Winter/High Load and Energy Sensitivity**

Year	Net Generating Capacity (MW)	Non-Partial Requirements Purchases (MW)	Partial Requirements Purchases (MW)	Net Firm Planned Capacity Retirements <sup>1</sup> (MW)	Net Firm Capacity Additions <sup>2</sup> (MW)	Net System Capacity (MW)	System Peak Demand		Reserve Margin <sup>3</sup>		Net Firm Planned Capacity Retirements (MW) <sup>1</sup>	
							Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)			Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)
2004/05	1,343	251	150	0	0	1,744	1,498	1,498	18.2%	18.2%	43	43
2005/06	1,343	305	160	(16)	0	1,792	1,539	1,539	18.3%	18.3%	46	46
2006/07	1,343	305	120	(16)	42	1,794	1,573	1,573	15.2%	15.2%	3	3
2007/08	1,343	205	65	(16)	139	1,736	1,607	1,607	8.3%	8.3%	(103)	(103)
2008/09	1,343	205	45	(16)	139	1,716	1,658	1,658	3.6%	3.6%	(184)	(184)
2009/10	1,140	105	70	(16)	139	1,438	1,487	1,487	-3.5%	-3.5%	(262)	(262)
2010/11	1,140	105	45	(16)	139	1,413	1,521	1,521	-7.3%	-7.3%	(330)	(330)
2011/12	1,140	105	45	(16)	389	1,663	1,557	1,557	7.0%	7.0%	(121)	(121)
2012/13	1,140	105	45	(16)	389	1,663	1,594	1,594	4.5%	4.5%	(163)	(163)
2013/14	1,140	105	0	(16)	389	1,618	1,630	1,630	-0.7%	-0.7%	(256)	(256)
2014/15	1,140	105	0	(16)	389	1,618	1,667	1,667	-2.9%	-2.9%	(299)	(299)
2015/16	1,140	105	0	(16)	389	1,618	1,705	1,705	-5.1%	-5.1%	(343)	(343)
2016/17	1,140	105	0	(16)	389	1,618	1,744	1,744	-7.2%	-7.2%	(387)	(387)
2017/18	1,140	105	0	(16)	431	1,660	1,782	1,782	-6.9%	-6.9%	(390)	(390)
2018/19	1,140	105	0	(16)	431	1,660	1,820	1,820	-8.8%	-8.8%	(433)	(433)
2019/20	1,140	105	0	(16)	431	1,660	1,858	1,858	-10.7%	-10.7%	(477)	(477)
2020/21	1,140	105	0	(16)	431	1,660	1,897	1,897	-12.5%	-12.5%	(521)	(521)
2021/22	1,140	105	0	(16)	431	1,660	1,936	1,936	-14.2%	-14.2%	(566)	(566)
2022/23	1,140	105	0	(16)	431	1,660	1,975	1,975	-15.9%	-15.9%	(611)	(611)
2023/24	1,140	105	0	(16)	431	1,660	2,015	2,015	-17.6%	-17.6%	(657)	(657)

<sup>1</sup> Reflects retirement of KUA's Hansel diesel units effective October 1, 2005.

<sup>2</sup> Firm capacity additions include Stock Island Combustion Turbine Unit 4 on line in January 2006, and 250 MW of a joint development coal plant in 2011. Also includes two LM6000 CTs in December 2007, and Stock Island Combustion Turbine Unit 5 January 2018.

<sup>3</sup> Reserve margin calculated as (Net System Capacity - System Peak Demand) / (System Peak Demand - Partial Requirements Purchases).

**Revised Table 10-5**  
**FMPA Projected Reliability Levels - Summer/Low Load and Energy Sensitivity**

Year	Net Generating Capacity (MW)	Non-Partial Requirements Purchases (MW)	Partial Requirements Purchases (MW)	Net Firm Planned Capacity Retirements <sup>1</sup> (MW)	Net Firm Capacity Additions <sup>2</sup> (MW)	Net System Capacity (MW)	System Peak Demand		Reserve Margin <sup>3</sup>		Excess/(Deficit) to Maintain 15% Reserve Margin	
							Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)	Before Interruptible and Load Management (%)	After Interruptible and Load Management (%)	Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)
2005	1,287	286	150	0	0	1,723	1,325	1,325	33.9%	33.9%	187	187
2006	1,287	305	160	(16)	42	1,778	1,359	1,359	34.9%	34.9%	203	203
2007	1,287	305	120	(16)	42	1,738	1,389	1,389	27.5%	27.5%	121	121
2008	1,287	205	65	(16)	126	1,667	1,419	1,419	18.3%	18.3%	4	4
2009	1,287	205	45	(16)	126	1,647	1,461	1,461	13.2%	13.2%	(68)	(68)
2010	1,089	105	70	(16)	126	1,374	1,330	1,330	3.5%	3.5%	(183)	(183)
2011	1,089	105	45	(16)	376	1,599	1,362	1,362	18.0%	18.0%	0	0
2012	1,089	105	45	(16)	376	1,599	1,394	1,394	15.2%	15.2%	(38)	(38)
2013	1,089	105	0	(16)	376	1,554	1,428	1,428	8.8%	8.8%	(131)	(131)
2014	1,089	105	0	(16)	376	1,554	1,460	1,460	6.4%	6.4%	(169)	(169)
2015	1,089	105	0	(16)	376	1,554	1,493	1,493	4.1%	4.1%	(208)	(208)
2016	1,089	105	0	(16)	376	1,554	1,528	1,528	1.7%	1.7%	(249)	(249)
2017	1,089	105	0	(16)	376	1,554	1,562	1,562	-0.5%	-0.5%	(289)	(289)
2018	1,089	105	0	(16)	418	1,596	1,596	1,596	0.0%	0.0%	(287)	(287)
2019	1,089	105	0	(16)	418	1,596	1,630	1,630	-2.1%	-2.1%	(327)	(327)
2020	1,089	105	0	(16)	418	1,596	1,663	1,663	-4.0%	-4.0%	(367)	(367)
2021	1,089	105	0	(16)	418	1,596	1,697	1,697	-6.0%	-6.0%	(407)	(407)
2022	1,089	105	0	(16)	418	1,596	1,731	1,731	-7.8%	-7.8%	(447)	(447)
2023	1,089	105	0	(16)	418	1,596	1,766	1,766	-9.6%	-9.6%	(487)	(487)
2024	1,089	105	0	(16)	418	1,596	1,801	1,801	-11.4%	-11.4%	(529)	(529)

<sup>1</sup> Reflects retirement of KUA's Hansel diesel units effective October 1, 2005.

<sup>2</sup> Firm capacity additions include Stock Island Combustion Turbine Unit 4 on line in January 2006, and 250 MW of a joint development coal plant in 2011. Also includes two LM6000 CTs in December 2007, and Stock Island Combustion Turbine Unit 5 January 2018.

<sup>3</sup> Reserve margin calculated as (Net System Capacity - System Peak Demand) / (System Peak Demand - Partial Requirements Purchases).

**Revised Table 10-6**  
**FMPA Projected Reliability Levels - Winter/Low Load and Energy Sensitivity**

Year	Net Generating Capacity (MW)	Non-Partial Requirements Purchases (MW)	Partial Requirements Purchases (MW)	Net Firm Planned Capacity Retirements <sup>1</sup> (MW)	Net Firm Capacity Additions <sup>2</sup> (MW)	Net System Capacity (MW)	System Peak Demand		Reserve Margin <sup>3</sup>		Excess/(Deficit) to Maintain 15% Reserve Margin	
							Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)	Before Interruptible and Load Management (%)	After Interruptible and Load Management (%)	Before Interruptible and Load Management (MW)	After Interruptible and Load Management (MW)
2004/05	1,343	251	150	0	0	1,744	1,330	1,330	35.1%	35.1%	237	237
2005/06	1,343	305	160	(16)	0	1,792	1,365	1,365	35.5%	35.5%	247	247
2006/07	1,343	305	120	(16)	42	1,794	1,394	1,394	31.4%	31.4%	209	209
2007/08	1,343	205	65	(16)	139	1,736	1,424	1,424	23.0%	23.0%	109	109
2008/09	1,343	205	45	(16)	139	1,716	1,467	1,467	17.5%	17.5%	35	35
2009/10	1,140	105	70	(16)	139	1,438	1,302	1,302	11.1%	11.1%	(48)	(48)
2010/11	1,140	105	45	(16)	139	1,413	1,332	1,332	6.3%	6.3%	(111)	(111)
2011/12	1,140	105	45	(16)	389	1,663	1,362	1,362	22.8%	22.8%	103	103
2012/13	1,140	105	45	(16)	389	1,663	1,394	1,394	19.9%	19.9%	67	67
2013/14	1,140	105	0	(16)	389	1,618	1,425	1,425	13.6%	13.6%	(21)	(21)
2014/15	1,140	105	0	(16)	389	1,618	1,456	1,456	11.1%	11.1%	(57)	(57)
2015/16	1,140	105	0	(16)	389	1,618	1,489	1,489	8.7%	8.7%	(94)	(94)
2016/17	1,140	105	0	(16)	389	1,618	1,521	1,521	6.3%	6.3%	(132)	(132)
2017/18	1,140	105	0	(16)	431	1,660	1,554	1,554	6.8%	6.8%	(127)	(127)
2018/19	1,140	105	0	(16)	431	1,660	1,586	1,586	4.7%	4.7%	(164)	(164)
2019/20	1,140	105	0	(16)	431	1,660	1,618	1,618	2.6%	2.6%	(200)	(200)
2020/21	1,140	105	0	(16)	431	1,660	1,650	1,650	0.6%	0.6%	(237)	(237)
2021/22	1,140	105	0	(16)	431	1,660	1,682	1,682	-1.3%	-1.3%	(275)	(275)
2022/23	1,140	105	0	(16)	431	1,660	1,715	1,715	-3.2%	-3.2%	(313)	(313)
2023/24	1,140	105	0	(16)	431	1,660	1,749	1,749	-5.1%	-5.1%	(351)	(351)

<sup>1</sup> Reflects retirement of KUA's Hansel diesel units effective October 1, 2005.

<sup>2</sup> Firm capacity additions include Stock Island Combustion Turbine Unit 4 on line in January 2006, and 250 MW of a joint development coal plant in 2011. Also includes two LM6000 CTs in December 2007, and Stock Island Combustion Turbine Unit 5 January 2018.

<sup>3</sup> Reserve margin calculated as (Net System Capacity - System Peak Demand) / (System Peak Demand - Partial Requirements Purchases).



Revised Table 10-7  
Summary of Sensitivity Analyses

Sensitivity Case	Expansion Plan CPWC Cost (\$ million)		
	TCEC Unit 1	Bidder A	Differential CPWC Savings with TCEC
Base Case	\$4,618.33	\$4,621.79	\$3.46
High Fuel Price	\$5,332.36	\$5,337.13	\$4.77
Low Fuel Price	\$4,043.75	\$4,039.18	-\$4.57
High Load Growth	\$5,079.94	\$5,081.80	\$1.86
Low Load Growth	\$4,249.12	\$4,293.76	\$44.64
High Capital Cost	\$4,649.99	\$4,637.80	-\$12.19
Low Capital Cost	\$4,582.79	\$4,605.78	\$22.99
High Present Worth Discount Rate	\$3,631.24	\$3,635.73	\$4.49

**Revised Appendix E**  
**Economic Evaluation Summaries**

**TCEC Unit 1**

<b>Case Description</b>		<b>Economic Parameters</b>		<b>Financial Parameters</b>	
Scenario:	TCEC NFP	CPW Discount Rate:	5.0%	Fixed Charge Rate:	7.754%
Sensitivity:	Base Case TCEC	Capital Escalation Rate:	2.5%	Interest During Const.:	5.0%
Initial Unit Addition:	TCEC Unit 1	Base Year for \$:	2005	Finance Term (yrs):	30
				Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost <sup>1</sup> (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
TCEC Unit 1	301	217,672	22	06/01	2008	229,711	17,812
LM6000	47.5	32,176	8	06/01	2015	41,950	3,253
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
1X1 7FA	301	177,325	22	06/01	2022	278,702	21,611

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed <sup>2</sup> (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424
2008	\$245,841	\$31,267	\$5,479	\$1,580	\$0	\$284,167	\$17,812	\$0	\$0	\$0	\$0	\$10,390	\$294,557	\$1,074,873
2009	\$257,316	\$33,433	\$12,392	\$1,533	\$0	\$304,674	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$322,486	\$1,340,183
2010	\$248,435	\$33,122	\$12,442	\$1,720	\$0	\$295,719	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$313,531	\$1,585,843
2011	\$234,715	\$33,146	\$12,494	\$2,100	\$0	\$282,455	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$300,267	\$1,809,907
2012	\$235,889	\$32,828	\$12,547	\$1,484	\$0	\$282,747	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$300,559	\$2,023,508
2013	\$257,974	\$29,873	\$12,601	\$1,611	\$0	\$302,059	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$319,871	\$2,240,010
2014	\$276,728	\$27,795	\$12,656	\$1,856	\$0	\$319,035	\$17,812	\$0	\$0	\$0	\$0	\$17,812	\$336,847	\$2,457,144
2015	\$298,740	\$29,186	\$13,357	\$1,814	\$0	\$343,097	\$21,065	\$0	\$0	\$0	\$0	\$19,709	\$362,806	\$2,679,876
2016	\$284,262	\$27,723	\$16,124	\$1,670	\$0	\$329,778	\$55,353	\$0	\$0	\$0	\$0	\$41,066	\$370,844	\$2,896,701
2017	\$285,261	\$27,232	\$17,879	\$1,369	\$0	\$331,741	\$55,353	\$0	\$0	\$0	\$0	\$0	\$387,094	\$3,112,249
2018	\$299,310	\$28,695	\$18,066	\$1,643	\$0	\$347,713	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$403,066	\$3,326,004
2019	\$319,343	\$30,187	\$18,258	\$1,752	\$0	\$369,540	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$424,892	\$3,540,603
2020	\$341,990	\$31,629	\$18,455	\$1,651	\$0	\$393,724	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$449,077	\$3,756,617
2021	\$358,579	\$33,258	\$18,657	\$2,065	\$0	\$412,559	\$55,353	\$0	\$0	\$0	\$0	\$55,353	\$467,912	\$3,970,973
2022	\$360,734	\$35,196	\$26,479	\$2,428	\$0	\$424,838	\$76,963	\$0	\$0	\$0	\$0	\$67,959	\$492,797	\$4,185,978
2023	\$369,587	\$37,135	\$32,111	\$2,304	\$0	\$441,138	\$76,963	\$0	\$0	\$0	\$0	\$76,963	\$518,102	\$4,401,260
2024	\$398,226	\$38,968	\$32,376	\$1,986	\$0	\$471,557	\$76,963	\$0	\$0	\$0	\$0	\$76,963	\$548,520	\$4,618,328

Notes:  
 (1) Capital cost for TCEC Unit 1 is presented in as spent dollars for 2008 operation, but does not include interest during construction.  
 (2) Fixed costs are included only for new unit additions.

**LM6000 and 7EA 2008**

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	LM6000 and 7EA CTs 2008

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
LM6000	47.5	32,176	8	06/01	2008	35,291	2,736
7EA SC	77.5	43,885	12	06/01	2008	48,327	3,747
TCEC 1x1 7FA	301	217,672	22	06/01	2009	235,454	18,257
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
1X1 7FA	301	177,325	22	06/01	2024	292,812	22,705

Year	Production Cost						Capital Cost					Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)	
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)			
		Variable (\$1,000)	Fixed <sup>1</sup> (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708	
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909	
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424	
2008	\$265,071	\$32,774	\$1,031	\$1,718	\$0	\$300,594	\$6,484	\$0	\$0	\$0	\$3,782	\$304,376	\$1,083,355	
2009	\$266,132	\$34,016	\$7,310	\$1,797	\$0	\$309,255	\$24,741	\$0	\$0	\$0	\$17,134	\$326,389	\$1,351,876	
2010	\$246,980	\$33,277	\$14,290	\$1,605	\$0	\$296,152	\$24,741	\$0	\$0	\$0	\$24,741	\$320,893	\$1,603,304	
2011	\$233,040	\$33,302	\$14,387	\$1,659	\$0	\$282,388	\$24,741	\$0	\$0	\$0	\$0	\$24,741	\$307,128	\$1,832,488
2012	\$242,376	\$33,065	\$14,488	\$1,198	\$0	\$291,127	\$24,741	\$0	\$0	\$0	\$0	\$24,741	\$315,868	\$2,056,969
2013	\$258,564	\$29,857	\$14,590	\$1,498	\$0	\$304,509	\$24,741	\$0	\$0	\$0	\$0	\$24,741	\$329,250	\$2,279,818
2014	\$273,300	\$27,809	\$14,695	\$1,515	\$0	\$317,319	\$24,741	\$0	\$0	\$0	\$0	\$24,741	\$342,080	\$2,500,313
2015	\$297,224	\$29,165	\$14,803	\$1,598	\$0	\$342,790	\$24,741	\$0	\$0	\$0	\$0	\$24,741	\$367,530	\$2,725,945
2016	\$284,483	\$27,820	\$17,141	\$1,700	\$0	\$331,144	\$59,029	\$0	\$0	\$0	\$0	\$44,742	\$375,886	\$2,945,718
2017	\$284,524	\$27,292	\$18,921	\$1,349	\$0	\$332,086	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$391,115	\$3,163,505
2018	\$299,277	\$28,775	\$19,135	\$1,594	\$0	\$348,780	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$407,809	\$3,379,775
2019	\$318,744	\$30,279	\$19,354	\$1,825	\$0	\$370,202	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$429,231	\$3,596,566
2020	\$341,824	\$31,735	\$19,578	\$1,731	\$0	\$394,868	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$453,897	\$3,814,898
2021	\$358,058	\$33,441	\$19,808	\$2,070	\$0	\$413,377	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$472,406	\$4,031,313
2022	\$385,660	\$35,346	\$20,044	\$2,200	\$0	\$443,250	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$502,279	\$4,250,455
2023	\$414,280	\$37,421	\$20,285	\$2,227	\$0	\$474,214	\$59,029	\$0	\$0	\$0	\$0	\$59,029	\$533,243	\$4,472,029
2024	\$404,294	\$38,971	\$28,203	\$2,426	\$0	\$473,894	\$81,734	\$0	\$0	\$0	\$0	\$72,273	\$546,167	\$4,688,166

Notes:  
 (1) Fixed costs are included only for new unit additions.

## Bidder A 5-Year

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder A 5-Year

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

### Generation Additions

Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder A 5-Year	300			01/01	2008		
1x1 7FA	301	217,672	22	06/01	2013	259,897	20,152
LM6000	47.5	32,176	8	06/01	2015	41,950	3,253
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
1x1 7FA	301	177,325	22	06/01	2022	278,702	21,611

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Existing Bidder A Contract Savings (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed1 (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	-\$147	\$0	\$0	\$0	-\$147	\$298,561	\$298,561
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	-\$459	\$0	\$0	\$0	-\$459	\$289,553	\$574,325
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	-\$804	\$0	\$0	\$0	-\$804	\$269,876	\$819,110
2008	\$241,437	\$30,021	\$26,280	\$1,561	\$0	\$299,299	\$0	-\$816	\$0	\$0	\$0	-\$816	\$298,483	\$1,076,951
2009	\$263,964	\$32,491	\$26,820	\$1,494	\$0	\$324,770	\$0	-\$840	\$0	\$0	\$0	-\$840	\$323,930	\$1,343,449
2010	\$255,039	\$31,359	\$27,360	\$1,774	\$0	\$315,531	\$0	\$0	\$0	\$0	\$0	\$0	\$315,531	\$1,590,676
2011	\$242,975	\$31,310	\$27,936	\$1,704	\$0	\$303,926	\$0	\$0	\$0	\$0	\$0	\$0	\$303,926	\$1,817,470
2012	\$238,132	\$31,427	\$28,548	\$1,366	\$0	\$299,473	\$0	\$0	\$0	\$0	\$0	\$0	\$299,473	\$2,030,300
2013	\$257,974	\$29,873	\$12,601	\$1,611	\$0	\$302,059	\$20,152	\$0	\$0	\$0	\$0	\$11,756	\$313,815	\$2,242,702
2014	\$276,728	\$27,795	\$12,656	\$1,856	\$0	\$319,035	\$20,152	\$0	\$0	\$0	\$0	\$20,152	\$339,188	\$2,461,346
2015	\$298,740	\$29,186	\$13,357	\$1,814	\$0	\$343,097	\$23,405	\$0	\$0	\$0	\$0	\$22,050	\$365,146	\$2,685,514
2016	\$284,262	\$27,723	\$16,124	\$1,670	\$0	\$329,778	\$57,693	\$0	\$0	\$0	\$0	\$43,407	\$373,185	\$2,903,707
2017	\$285,261	\$27,232	\$17,879	\$1,369	\$0	\$331,741	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$389,434	\$3,120,559
2018	\$299,310	\$28,695	\$18,066	\$1,643	\$0	\$347,713	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$405,407	\$3,335,555
2019	\$319,343	\$30,187	\$18,258	\$1,752	\$0	\$369,540	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$427,233	\$3,551,337
2020	\$341,990	\$31,629	\$18,455	\$1,651	\$0	\$393,724	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$451,417	\$3,768,476
2021	\$358,579	\$33,258	\$18,657	\$2,065	\$0	\$412,559	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$470,252	\$3,983,904
2022	\$360,734	\$35,196	\$26,479	\$2,428	\$0	\$424,838	\$79,304	\$0	\$0	\$0	\$0	\$70,299	\$495,137	\$4,199,931
2023	\$369,587	\$37,135	\$32,111	\$2,304	\$0	\$441,138	\$79,304	\$0	\$0	\$0	\$0	\$79,304	\$520,442	\$4,416,185
2024	\$398,226	\$38,968	\$32,376	\$1,986	\$0	\$471,557	\$79,304	\$0	\$0	\$0	\$0	\$79,304	\$550,860	\$4,634,179

Notes:

(1) Fixed costs are included only for new unit additions.

**Bidder A 5-Year Limited Bidder A Natural Gas**

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder A 5-Year Natural gas limits on Bidder A

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder A 5-Year	300			01/01	2008		
1x1 7FA	301	217,672	22	06/01	2013	259,897	20,152
LM6000	47.5	32,176	8	06/01	2015	41,950	3,253
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
1X1 7FA	301	177,325	22	06/01	2022	278,702	21,611

Year	Production Cost						Capital Cost					Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)	
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Existing Bidder A Contract Savings (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)			Total Capital Cost (\$1,000)
		Variable (\$1,000)	Fixed1 (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	-\$147	\$0	\$0	\$0	-\$147	\$298,561	\$298,561
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	-\$459	\$0	\$0	\$0	-\$459	\$289,553	\$574,325
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	-\$804	\$0	\$0	\$0	-\$804	\$269,876	\$819,110
2008	\$254,453	\$31,851	\$26,280	\$2,110	\$0	\$314,694	\$0	-\$816	\$0	\$0	\$0	-\$816	\$313,878	\$1,090,250
2009	\$283,942	\$34,341	\$26,820	\$2,113	\$0	\$347,215	\$0	-\$840	\$0	\$0	\$0	-\$840	\$346,375	\$1,375,214
2010	\$277,603	\$34,417	\$27,360	\$2,541	\$0	\$341,922	\$0	\$0	\$0	\$0	\$0	\$0	\$341,922	\$1,643,119
2011	\$263,310	\$34,861	\$27,936	\$2,541	\$0	\$328,648	\$0	\$0	\$0	\$0	\$0	\$0	\$328,648	\$1,888,361
2012	\$251,384	\$35,595	\$28,548	\$2,556	\$0	\$318,084	\$0	\$0	\$0	\$0	\$0	\$0	\$318,084	\$2,114,417
2013	\$257,974	\$29,873	\$12,601	\$1,611	\$0	\$302,059	\$20,152	\$0	\$0	\$0	\$0	\$11,756	\$313,815	\$2,326,819
2014	\$276,728	\$27,795	\$12,656	\$1,856	\$0	\$319,035	\$20,152	\$0	\$0	\$0	\$0	\$20,152	\$339,188	\$2,545,463
2015	\$298,740	\$29,186	\$13,357	\$1,814	\$0	\$343,097	\$23,405	\$0	\$0	\$0	\$0	\$22,050	\$365,146	\$2,769,631
2016	\$284,262	\$27,723	\$16,124	\$1,670	\$0	\$329,778	\$57,693	\$0	\$0	\$0	\$0	\$43,407	\$373,185	\$2,987,824
2017	\$285,261	\$27,232	\$17,879	\$1,369	\$0	\$331,741	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$389,434	\$3,204,676
2018	\$299,310	\$28,695	\$18,066	\$1,643	\$0	\$347,713	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$405,407	\$3,419,672
2019	\$319,343	\$30,187	\$18,258	\$1,752	\$0	\$369,540	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$427,233	\$3,635,453
2020	\$341,990	\$31,629	\$18,455	\$1,651	\$0	\$393,724	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$451,417	\$3,852,593
2021	\$358,579	\$33,258	\$18,657	\$2,065	\$0	\$412,559	\$57,693	\$0	\$0	\$0	\$0	\$57,693	\$470,252	\$4,066,021
2022	\$360,734	\$35,196	\$26,479	\$2,428	\$0	\$424,838	\$79,304	\$0	\$0	\$0	\$0	\$70,299	\$495,137	\$4,284,048
2023	\$369,587	\$37,135	\$32,111	\$2,304	\$0	\$441,138	\$79,304	\$0	\$0	\$0	\$0	\$79,304	\$520,442	\$4,500,302
2024	\$398,226	\$38,968	\$32,376	\$1,986	\$0	\$471,557	\$79,304	\$0	\$0	\$0	\$0	\$79,304	\$550,860	\$4,718,296

Notes:  
(1) Fixed costs are included only for new unit additions.

### Bidder A 20-Year

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder A 20-Year

Economic Parameters		
CPW Discount Rate:		5.0%
Capital Escalation Rate:		2.5%
Base Year for \$		2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder A 20-Year	300			01/01	2008		
LM6000	47.5	32,176	8	06/01	2015	41,950	3,253
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
LM6000	47.5	32,176	8	06/01	2023	51,112	3,963
LM6000	47.5	32,176	8	06/01	2024	52,390	4,062

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Existing Bidder A Contract Savings (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed1 (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	-\$147	\$0	\$0	\$0	-\$147	\$298,561	\$298,561
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	-\$459	\$0	\$0	\$0	-\$459	\$289,553	\$574,325
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	-\$804	\$0	\$0	\$0	-\$804	\$269,876	\$819,110
2008	\$241,437	\$30,021	\$26,280	\$1,561	\$0	\$299,299	\$0	-\$816	\$0	\$0	\$0	-\$816	\$298,483	\$1,076,951
2009	\$283,964	\$32,491	\$26,820	\$1,494	\$0	\$324,770	\$0	-\$840	\$0	\$0	\$0	-\$840	\$323,930	\$1,343,449
2010	\$255,039	\$31,359	\$27,360	\$1,774	\$0	\$315,531	\$0	\$0	\$0	\$0	\$0	\$0	\$315,531	\$1,590,676
2011	\$242,975	\$31,310	\$27,936	\$1,704	\$0	\$303,926	\$0	\$0	\$0	\$0	\$0	\$0	\$303,926	\$1,817,470
2012	\$238,132	\$31,427	\$28,548	\$1,366	\$0	\$299,473	\$0	\$0	\$0	\$0	\$0	\$0	\$299,473	\$2,030,300
2013	\$270,158	\$28,229	\$29,124	\$1,472	\$0	\$328,983	\$0	\$0	\$0	\$0	\$0	\$0	\$328,983	\$2,252,968
2014	\$281,509	\$26,555	\$29,736	\$1,560	\$0	\$339,359	\$0	\$0	\$0	\$0	\$0	\$0	\$339,359	\$2,471,722
2015	\$300,585	\$27,864	\$31,028	\$1,680	\$0	\$361,157	\$3,253	\$0	\$0	\$0	\$0	\$1,897	\$363,054	\$2,694,606
2016	\$279,078	\$26,541	\$34,385	\$1,653	\$0	\$341,656	\$37,541	\$0	\$0	\$0	\$0	\$23,254	\$364,911	\$2,907,962
2017	\$283,930	\$26,152	\$36,079	\$1,734	\$0	\$347,895	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$385,436	\$3,122,587
2018	\$297,193	\$27,511	\$36,206	\$1,888	\$0	\$362,798	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$400,339	\$3,334,895
2019	\$319,255	\$28,941	\$36,335	\$2,105	\$0	\$386,636	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$424,177	\$3,549,133
2020	\$335,889	\$30,420	\$36,488	\$2,118	\$0	\$404,894	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$442,435	\$3,761,952
2021	\$356,669	\$31,957	\$36,603	\$2,505	\$0	\$427,734	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$465,275	\$3,975,100
2022	\$378,169	\$33,617	\$36,743	\$2,728	\$0	\$451,256	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$488,797	\$4,188,361
2023	\$403,545	\$35,153	\$37,670	\$2,526	\$0	\$478,893	\$41,504	\$0	\$0	\$0	\$0	\$39,853	\$518,746	\$4,403,910
2024	\$428,393	\$36,954	\$39,206	\$2,145	\$0	\$506,699	\$45,566	\$0	\$0	\$0	\$0	\$43,874	\$550,573	\$4,621,791

Notes:

(1) Fixed costs are included only for new unit additions.

**Bidder A 20-Year Limited Bidder A Natural Gas**

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder A 20-Year Natural gas limits on Bidder A

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder A 20-Year LM6000	300			01/01	2008		
	47.5	32,176	8	06/01	2015	41,950	3,253
Supercritical PC LM6000	250	315,963	54	06/01	2016	442,199	34,288
	47.5	32,176	8	06/01	2023	51,112	3,963
	47.5	32,176	8	06/01	2024	52,390	4,062

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Existing Bidder A Contract Savings (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed1 (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	-\$147	\$0	\$0	\$0	-\$147	\$298,561	\$298,561
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	-\$459	\$0	\$0	\$0	-\$459	\$289,553	\$574,325
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	-\$804	\$0	\$0	\$0	-\$804	\$269,876	\$819,110
2008	\$254,453	\$31,851	\$26,280	\$2,110	\$0	\$314,694	\$0	-\$816	\$0	\$0	\$0	-\$816	\$313,878	\$1,090,250
2009	\$283,942	\$34,341	\$26,820	\$2,113	\$0	\$347,215	\$0	-\$840	\$0	\$0	\$0	-\$840	\$346,375	\$1,375,214
2010	\$279,812	\$34,924	\$27,360	\$3,194	\$0	\$345,290	\$0	\$0	\$0	\$0	\$0	\$0	\$345,290	\$1,645,758
2011	\$269,165	\$35,465	\$27,936	\$2,496	\$0	\$335,063	\$0	\$0	\$0	\$0	\$0	\$0	\$335,063	\$1,895,787
2012	\$262,276	\$35,933	\$28,548	\$1,895	\$0	\$328,652	\$0	\$0	\$0	\$0	\$0	\$0	\$328,652	\$2,129,354
2013	\$292,830	\$31,265	\$29,124	\$2,192	\$0	\$355,411	\$0	\$0	\$0	\$0	\$0	\$0	\$355,411	\$2,369,909
2014	\$305,298	\$27,769	\$29,736	\$3,030	\$0	\$365,832	\$0	\$0	\$0	\$0	\$0	\$0	\$365,832	\$2,605,728
2015	\$330,863	\$29,280	\$31,028	\$2,670	\$0	\$393,840	\$3,253	\$0	\$0	\$0	\$0	\$1,897	\$395,738	\$2,848,677
2016	\$307,169	\$27,584	\$34,385	\$2,523	\$0	\$371,661	\$37,541	\$0	\$0	\$0	\$0	\$23,254	\$394,915	\$3,079,576
2017	\$305,060	\$27,235	\$36,079	\$3,213	\$0	\$371,588	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$409,129	\$3,307,394
2018	\$329,871	\$29,094	\$36,206	\$2,703	\$0	\$397,873	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$435,414	\$3,538,303
2019	\$339,306	\$30,051	\$36,335	\$3,643	\$0	\$409,335	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$446,876	\$3,764,006
2020	\$368,440	\$31,623	\$36,468	\$2,911	\$0	\$439,443	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$476,983	\$3,993,443
2021	\$385,710	\$33,262	\$36,603	\$3,268	\$0	\$458,843	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$496,384	\$4,220,843
2022	\$407,833	\$35,009	\$36,743	\$4,011	\$0	\$483,596	\$37,541	\$0	\$0	\$0	\$0	\$37,541	\$521,137	\$4,448,213
2023	\$441,868	\$36,830	\$37,670	\$3,636	\$0	\$520,004	\$41,504	\$0	\$0	\$0	\$0	\$39,853	\$559,857	\$4,680,845
2024	\$461,523	\$38,402	\$39,206	\$3,778	\$0	\$542,910	\$45,566	\$0	\$0	\$0	\$0	\$43,874	\$586,783	\$4,913,055

Notes:  
(1) Fixed costs are included only for new unit additions.



## Bidder B

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder B

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder B	300			01/01	2009		
7EA CT	73	43,885	12	06/01	2015	57,446	4,454
Supercritical PC	250	315,963	54	06/01	2016	442,199	34,288
1X1 7FA	301	197,200	22	06/01	2023	332,690	25,797

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)			
		Variable (\$1,000)	Fixed1 (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708	
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909	
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424	
2008	\$251,384	\$32,976	\$21,600	\$785	\$0	\$306,746	\$0	\$0	\$0	\$0	\$0	\$306,746	\$1,085,402	
2009	\$274,384	\$35,617	\$21,564	\$876	\$0	\$332,442	\$0	\$0	\$0	\$0	\$0	\$332,442	\$1,358,903	
2010	\$269,386	\$34,813	\$21,492	\$975	\$0	\$326,666	\$0	\$0	\$0	\$0	\$0	\$326,666	\$1,614,854	
2011	\$250,300	\$36,107	\$21,456	\$1,085	\$0	\$308,948	\$0	\$0	\$0	\$0	\$0	\$308,948	\$1,845,396	
2012	\$250,362	\$35,632	\$45,339	\$813	\$0	\$332,166	\$0	\$0	\$0	\$0	\$0	\$332,166	\$2,081,460	
2013	\$275,992	\$30,826	\$45,187	\$692	\$0	\$352,697	\$0	\$0	\$0	\$0	\$0	\$352,697	\$2,320,179	
2014	\$291,950	\$27,850	\$45,034	\$708	\$0	\$365,542	\$0	\$0	\$0	\$0	\$0	\$365,542	\$2,555,811	
2015	\$313,321	\$29,458	\$45,540	\$645	\$0	\$388,963	\$4,454	\$0	\$0	\$0	\$2,598	\$391,562	\$2,796,196	
2016	\$295,826	\$27,635	\$48,051	\$926	\$0	\$372,438	\$38,742	\$0	\$0	\$0	\$24,456	\$396,894	\$3,028,251	
2017	\$294,503	\$27,004	\$49,743	\$1,205	\$0	\$372,453	\$38,742	\$0	\$0	\$0	\$38,742	\$411,196	\$3,257,220	
2018	\$311,301	\$28,432	\$49,866	\$1,265	\$0	\$390,865	\$38,742	\$0	\$0	\$0	\$38,742	\$429,608	\$3,485,050	
2019	\$330,068	\$29,862	\$49,993	\$1,159	\$0	\$411,082	\$38,742	\$0	\$0	\$0	\$38,742	\$449,824	\$3,712,242	
2020	\$348,268	\$31,371	\$50,122	\$1,158	\$0	\$430,919	\$38,742	\$0	\$0	\$0	\$38,742	\$469,662	\$3,938,157	
2021	\$368,200	\$32,923	\$50,255	\$1,187	\$0	\$452,565	\$38,742	\$0	\$0	\$0	\$38,742	\$491,307	\$4,163,231	
2022	\$394,597	\$34,594	\$50,392	\$1,137	\$0	\$480,718	\$38,742	\$0	\$0	\$0	\$38,742	\$519,461	\$4,389,870	
2023	\$401,582	\$36,341	\$58,494	\$1,241	\$0	\$497,657	\$64,539	\$0	\$0	\$0	\$53,791	\$551,448	\$4,619,008	
2024	\$414,793	\$38,383	\$64,334	\$1,444	\$0	\$518,954	\$64,539	\$0	\$0	\$0	\$64,539	\$583,493	\$4,849,916	

Notes:

(1) Fixed costs are included only for new unit additions.

### Bidder C Option 1 Escalating

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder C Option 1 Escalating

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder C Option 1 Escalating	311			01/01	2009		
3 LMG000	142.5	96,550	8	06/01	2008	105,897	8,211
Supercritical PC	250	315,963	54	06/01	2019	476,200	36,925

Year	Production Cost						Capital Cost					Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)	
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)			
		Variable (\$1,000)	Fixed (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708	
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909	
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424	
2008	\$262,688	\$32,326	\$1,624	\$1,586	\$0	\$298,225	\$8,211	\$0	\$0	\$0	\$4,790	\$303,014	\$1,082,179	
2009	\$258,527	\$32,029	\$30,643	\$1,455	\$0	\$322,654	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$330,865	\$1,354,382
2010	\$253,521	\$31,403	\$45,791	\$1,136	\$0	\$331,851	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$340,062	\$1,620,830
2011	\$235,420	\$31,735	\$46,722	\$1,484	\$0	\$315,361	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$323,573	\$1,862,285
2012	\$232,446	\$32,182	\$47,692	\$1,033	\$0	\$313,354	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$321,565	\$2,090,815
2013	\$260,872	\$29,639	\$54,325	\$967	\$0	\$345,802	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$354,014	\$2,330,425
2014	\$273,149	\$27,716	\$49,676	\$1,194	\$0	\$351,735	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$359,946	\$2,562,449
2015	\$296,878	\$29,115	\$50,689	\$1,119	\$0	\$377,800	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$386,012	\$2,799,427
2016	\$312,500	\$30,638	\$51,742	\$1,259	\$0	\$396,139	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$404,350	\$3,035,842
2017	\$330,130	\$31,949	\$51,826	\$1,459	\$0	\$415,364	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$423,576	\$3,271,705
2018	\$347,633	\$33,356	\$51,913	\$1,674	\$0	\$434,576	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$442,787	\$3,506,524
2019	\$333,025	\$31,791	\$54,400	\$1,872	\$0	\$421,088	\$45,136	\$0	\$0	\$0	\$0	\$29,751	\$450,838	\$3,734,228
2020	\$337,100	\$31,198	\$56,286	\$1,651	\$0	\$426,235	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$471,370	\$3,960,966
2021	\$356,994	\$32,592	\$56,484	\$1,804	\$0	\$447,873	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$493,009	\$4,186,819
2022	\$376,499	\$34,027	\$56,687	\$1,626	\$0	\$468,839	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$513,975	\$4,411,064
2023	\$396,070	\$35,506	\$56,895	\$1,970	\$0	\$490,440	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$535,576	\$4,633,607
2024	\$426,630	\$37,181	\$57,108	\$1,931	\$0	\$522,849	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$567,985	\$4,858,378

Notes:  
 (1) Fixed costs are included only for new unit additions.

### Bidder C Option 1 Levelized

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder C Option 1 Levelized

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder C Option 1 Levelized	311			01/01	2009		
3 LM6000	142.5	96,550	8	06/01	2008	105,897	8,211
Supercritical PC	250	315,963	54	06/01	2019	476,200	36,925

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed1 (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708	
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909	
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424	
2008	\$262,688	\$32,326	\$1,624	\$1,586	\$0	\$298,225	\$8,211	\$0	\$0	\$0	\$4,790	\$303,014	\$1,082,179	
2009	\$258,527	\$32,029	\$52,475	\$1,455	\$0	\$344,486	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$352,697	\$1,372,344
2010	\$253,521	\$31,403	\$52,546	\$1,136	\$0	\$338,605	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$346,817	\$1,644,084
2011	\$235,420	\$31,735	\$52,619	\$1,484	\$0	\$321,258	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$329,469	\$1,889,939
2012	\$232,446	\$32,182	\$52,693	\$1,033	\$0	\$318,355	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$326,566	\$2,122,023
2013	\$260,872	\$29,639	\$52,770	\$967	\$0	\$344,247	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$352,459	\$2,360,581
2014	\$273,149	\$27,716	\$52,848	\$1,194	\$0	\$354,907	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$363,118	\$2,594,650
2015	\$296,878	\$29,115	\$52,928	\$1,119	\$0	\$380,039	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$368,251	\$2,833,002
2016	\$312,500	\$30,638	\$53,011	\$1,259	\$0	\$397,408	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$405,619	\$3,070,159
2017	\$330,130	\$31,949	\$53,095	\$1,459	\$0	\$416,633	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$424,845	\$3,306,729
2018	\$347,633	\$33,356	\$53,182	\$1,674	\$0	\$435,845	\$8,211	\$0	\$0	\$0	\$0	\$8,211	\$444,056	\$3,542,221
2019	\$333,025	\$31,791	\$55,669	\$1,872	\$0	\$422,357	\$45,136	\$0	\$0	\$0	\$0	\$29,751	\$452,107	\$3,770,566
2020	\$337,100	\$31,198	\$57,555	\$1,651	\$0	\$427,503	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$472,639	\$3,997,913
2021	\$356,994	\$32,592	\$57,753	\$1,804	\$0	\$449,142	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$494,278	\$4,224,348
2022	\$376,499	\$34,027	\$57,956	\$1,626	\$0	\$470,108	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$515,244	\$4,449,147
2023	\$396,070	\$35,506	\$58,164	\$1,970	\$0	\$491,709	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$536,845	\$4,672,217
2024	\$426,630	\$37,181	\$58,377	\$1,931	\$0	\$524,118	\$45,136	\$0	\$0	\$0	\$0	\$45,136	\$569,254	\$4,897,490

Notes:  
 (1) Fixed costs are included only for new unit additions.

### Bidder C Option 2 Escalating

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder C Option 2 Escalating

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder C Option 2 Escalating	311			01/01	2009		
LM6000	47.5	32,183	8	06/01	2008	35,299	2,737
7EA CT	73	43,885	12	06/01	2008	48,327	3,747

Year	Production Cost						Capital Cost						Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)			
		Variable (\$1,000)	Fixed <sup>1</sup> (\$1,000)											
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708	
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909	
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424	
2008	\$265,092	\$32,774	\$1,031	\$1,718	\$0	\$300,615	\$6,484	\$0	\$0	\$0	\$3,783	\$304,398	\$1,083,374	
2009	\$255,977	\$30,506	\$34,706	\$1,868	\$0	\$323,057	\$6,484	\$0	\$0	\$0	\$6,484	\$329,541	\$1,354,488	
2010	\$242,032	\$28,657	\$47,653	\$1,430	\$0	\$319,772	\$6,484	\$0	\$0	\$0	\$6,484	\$326,256	\$1,610,118	
2011	\$225,121	\$25,163	\$61,111	\$1,154	\$0	\$312,549	\$6,484	\$0	\$0	\$0	\$6,484	\$319,034	\$1,848,186	
2012	\$227,130	\$23,105	\$75,626	\$513	\$0	\$326,375	\$6,484	\$0	\$0	\$0	\$6,484	\$332,860	\$2,084,743	
2013	\$243,810	\$23,487	\$77,046	\$773	\$0	\$345,117	\$6,484	\$0	\$0	\$0	\$6,484	\$351,601	\$2,322,721	
2014	\$264,154	\$24,312	\$78,544	\$743	\$0	\$367,753	\$6,484	\$0	\$0	\$0	\$6,484	\$374,237	\$2,563,958	
2015	\$281,734	\$25,748	\$80,119	\$970	\$0	\$388,571	\$6,484	\$0	\$0	\$0	\$6,484	\$395,055	\$2,806,487	
2016	\$294,964	\$27,049	\$81,695	\$1,035	\$0	\$404,743	\$6,484	\$0	\$0	\$0	\$6,484	\$411,228	\$3,046,924	
2017	\$315,172	\$28,265	\$81,749	\$1,121	\$0	\$426,308	\$6,484	\$0	\$0	\$0	\$6,484	\$432,792	\$3,287,919	
2018	\$332,774	\$29,530	\$81,804	\$780	\$0	\$444,888	\$6,484	\$0	\$0	\$0	\$6,484	\$451,372	\$3,527,291	
2019	\$351,201	\$30,725	\$81,860	\$956	\$0	\$464,742	\$6,484	\$0	\$0	\$0	\$6,484	\$471,226	\$3,765,292	
2020	\$371,215	\$31,972	\$81,918	\$1,124	\$0	\$486,229	\$6,484	\$0	\$0	\$0	\$6,484	\$492,714	\$4,002,296	
2021	\$393,226	\$33,268	\$81,977	\$1,442	\$0	\$509,913	\$6,484	\$0	\$0	\$0	\$6,484	\$516,397	\$4,238,864	
2022	\$410,028	\$34,553	\$82,037	\$1,506	\$0	\$528,125	\$6,484	\$0	\$0	\$0	\$6,484	\$534,609	\$4,472,112	
2023	\$432,277	\$36,032	\$82,099	\$1,680	\$0	\$552,089	\$6,484	\$0	\$0	\$0	\$6,484	\$558,573	\$4,704,210	
2024	\$463,069	\$37,456	\$82,163	\$1,772	\$0	\$584,481	\$6,484	\$0	\$0	\$0	\$6,484	\$590,966	\$4,938,075	

Notes:

(1) Fixed costs are included only for new unit additions.

### Bidder C Option 2 Levelized

Case Description	
Scenario:	TCEC NFP
Sensitivity:	Base Case TCEC
Initial Unit Addition	Bidder C Option 2 Levelized

Economic Parameters	
CPW Discount Rate:	5.0%
Capital Escalation Rate:	2.5%
Base Year for \$	2005

Financial Parameters	
Fixed Charge Rate:	7.754%
Interest During Const.:	5.0%
Finance Term (yrs):	30
Plant Life:	30

Generation Additions							
Unit	Size (MW)	2005 Capital Cost (\$1,000)	Construction Period (months)	Month/Day Installed (mm/dd)	Year Installed (year)	Installed Cost (\$1,000)	Levelized Cost (\$1,000)
Bidder C Option 2 Levelized	311			01/01	2009		
LV6000	47.5	32,183	8	06/01	2008	35,299	2,737
7EA CT	73	43,885	12	06/01	2008	48,327	3,747

Year	Production Cost						Capital Cost					Total System Cost (\$1,000)	Cumulative Present Worth Cost (\$1,000)
	Fuel and Energy Cost (\$1,000)	O&M		Start-Up (\$1,000)	Shut-Down (\$1,000)	Total Production Cost (\$1,000)	Unit Capital Cost (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Other Capital Expenditures (\$1,000)	Total Capital Cost (\$1,000)		
		Variable (\$1,000)	Fixed <sup>1</sup> (\$1,000)										
2005	\$250,607	\$45,475	\$0	\$2,626	\$0	\$298,708	\$0	\$0	\$0	\$0	\$0	\$298,708	\$298,708
2006	\$239,948	\$47,399	\$0	\$2,664	\$0	\$290,012	\$0	\$0	\$0	\$0	\$0	\$290,012	\$574,909
2007	\$229,451	\$39,457	\$0	\$1,772	\$0	\$270,680	\$0	\$0	\$0	\$0	\$0	\$270,680	\$820,424
2008	\$265,092	\$32,774	\$1,031	\$1,718	\$0	\$300,615	\$6,484	\$0	\$0	\$0	\$3,783	\$304,398	\$1,083,374
2009	\$255,977	\$30,506	\$40,754	\$1,868	\$0	\$329,105	\$6,484	\$0	\$0	\$0	\$6,484	\$335,589	\$1,359,464
2010	\$242,032	\$28,657	\$55,082	\$1,430	\$0	\$327,201	\$6,484	\$0	\$0	\$0	\$6,484	\$333,685	\$1,620,915
2011	\$225,121	\$25,163	\$69,410	\$1,154	\$0	\$320,849	\$6,484	\$0	\$0	\$0	\$6,484	\$327,333	\$1,865,176
2012	\$227,130	\$23,105	\$84,389	\$513	\$0	\$335,138	\$6,484	\$0	\$0	\$0	\$6,484	\$331,623	\$2,107,961
2013	\$243,810	\$23,487	\$84,438	\$773	\$0	\$352,508	\$6,484	\$0	\$0	\$0	\$6,484	\$358,993	\$2,350,941
2014	\$264,154	\$24,312	\$84,488	\$743	\$0	\$373,697	\$6,484	\$0	\$0	\$0	\$6,484	\$380,181	\$2,596,009
2015	\$281,734	\$25,748	\$84,539	\$970	\$0	\$392,991	\$6,484	\$0	\$0	\$0	\$6,484	\$399,475	\$2,841,252
2016	\$294,964	\$27,049	\$84,591	\$1,035	\$0	\$407,639	\$6,484	\$0	\$0	\$0	\$6,484	\$414,123	\$3,083,382
2017	\$315,172	\$28,265	\$84,644	\$1,121	\$0	\$429,203	\$6,484	\$0	\$0	\$0	\$6,484	\$435,688	\$3,325,989
2018	\$332,774	\$29,530	\$84,699	\$780	\$0	\$447,783	\$6,484	\$0	\$0	\$0	\$6,484	\$454,268	\$3,566,897
2019	\$351,201	\$30,725	\$84,756	\$956	\$0	\$467,638	\$6,484	\$0	\$0	\$0	\$6,484	\$474,122	\$3,806,360
2020	\$371,215	\$31,972	\$84,813	\$1,124	\$0	\$489,125	\$6,484	\$0	\$0	\$0	\$6,484	\$495,609	\$4,044,757
2021	\$393,226	\$33,268	\$84,872	\$1,442	\$0	\$512,808	\$6,484	\$0	\$0	\$0	\$6,484	\$519,293	\$4,282,651
2022	\$410,028	\$34,553	\$84,933	\$1,506	\$0	\$531,020	\$6,484	\$0	\$0	\$0	\$6,484	\$537,605	\$4,517,163
2023	\$432,277	\$36,032	\$84,995	\$1,680	\$0	\$554,984	\$6,484	\$0	\$0	\$0	\$6,484	\$561,468	\$4,750,464
2024	\$463,089	\$37,456	\$85,059	\$1,772	\$0	\$587,377	\$6,484	\$0	\$0	\$0	\$6,484	\$593,861	\$4,985,475

Notes:  
(1) Fixed costs are included only for new unit additions.